## Where have all the apprentices gone?

Prepared: Richard Tovey 01/09/2016

Early this year I celebrated 40 years in this industry. 40 years that has seen many changes; changes in industries; new ones, old ones and ones that no longer exist. Changes in technologies; some have come and some have gone, always with the enthusiasts declaring the latest sparkling new technology as the way of the future, only for it to find its place among all the others that merely contribute to alternative methods. However, the biggest change that I have witnessed is in attitudes. Manufacturing, and a career in manufacturing, was not something to be embarrassed about. It wasn't something that was done somewhere else by someone else; we made things, we added value, we created wealth and we were proud of it.

When I started my apprenticeship it was the beginning of a career. It wasn't an end but a beginning that had clear and valuable options, we could

- Stay on the shop floor and be a craftsman who had valuable skills that were valued and respected
- We could undertake further technical training and look to a design or technical management role
- With specialist training we could move up the management tree to maintenance, operational management and plant management.
- Or like me, you could aspire to own your own business

Many of the people that I went through my apprenticeship with have done that. Those that have not already retired are in senior positions. It is most disappointing now, that the biggest issue I see on a daily basis is the change in attitude to manufacturing, from nearly every sector, our educators, government at all levels, those that are still in manufacturing and those from outside. The reality is that other than government service and agencies, manufacturing is still one of the largest sources of employment. Manufacturing has a future in Australia and for some it will be a very good future. We need to grow and nurture manufacturing, but there are definite challenges that will not be overcome with trite three word slogans.

The reality is that we had a number of advantages

- Stable and supportive government
- Generally, a higher level of education than our competitors
- Higher technical skills
- Technology we had technology that most of our competitors didn't have access to
- Infrastructure that enabled production

Most of the above seem to have been squandered away by neglect over many of years. Let's look at some of the issues.

- Having stable and supportive government. The reality is that government is preoccupied with
  populist minority issues and short term horizons. Therefore, business can't make strategic,
  long term decisions with a sense of certainty, so we all only make short term decisions, which
  is not preparing our businesses or our nation for a prosperous future
- Generally higher education yes but we seem to be more focused on social issues and I would suggest social engineering than what we used to call the three R's.
- As for technical skills. I see two main points.
  - We seem to be more about employment readiness than providing functional skills,
  - And how have our technical training institutes risen to the challenges of the new technologies? It would seem to me by offering low-tech options such as personal training and beauty therapy.

At Hi-tech, we have come to the conclusion that we have no control over many of these issues, but one thing that we can do is to ensure that we have the technical skills that we need for the business to be sustainable through our approach to apprenticeships.

Apprentices are an investment in the future of companies and industries. A technical company without apprentices is a company whose management does not see a future for. When I look around, the average age of technical staff in our industry is much too high, in many cases retirement is in

sight. How will companies grow and develop as we lose this technical resource, how will they even function? There has been far too much cost saving and not enough business development. For the accountants, training is the easiest cost cutting target and maintenance the second easiest. Instead of cutting expenditure, we need to be investing in our skills and our technologies. How many manufacturing companies are operating 20 plus year old equipment; how many have no apprentices and no technical trainees; how are we going to replace the technical skills that are not far from retirement? We can no longer just rob them from the factory down the road for a dollar an hour more; they are doing exactly the same.

Until recently, we had been equally guilty of not providing for our future technical needs. Then, about five years ago, we realised that we could no longer just advertise and recruit staff by paying a bit more than the company down the road. They had stopped training as well and the staff were just not available. At that point we tried the traditional school leaver approach to apprenticeships and advertised for an apprentice. We had four or five responses, three of which we invited for interviews. One didn't turn up; one turned up without pen or paper, either blank or as a resume - we are still waiting for him to send it through; and the third came because some government department had told him he had too. That was when we decided that we had to change the approach. After some discussion both within and externally to Hi-tech Tooling, we engaged a consultant to advertise for a trainee with a minimum qualification of a degree in mechanical engineering. Within 5 days we had 320 applicants. Not only was this a result that we didn't expect, it created a new issue with our selection process. After a number of interviews and many discussions we offered one of the applicants an apprenticeship which he accepted. With the assistance of TAFE, we put together an accelerated apprenticeship, with the end result being that the applicant would, within two years, complete training to C4 as a toolmaker and have had two full years of workshop experience.

To a large degree this was a learning experience for us. We needed to change the way we engaged with apprentices. Over all however the experience has been very rewarding, Tom, our degree qualified apprentice, was older and obviously better educated than the traditional apprentice and with that came a level of maturity. After three years Tom moved into the production office as a step towards his career development and after a year in the office he has decided to extend his horizons and is traveling in the UK; what we used to call being a journeyman, and as a journeyman, we look forward to Tom's return as a well-rounded, trade qualified engineer. A trade qualified mechanical engineer with significant workshop experience is potentially a very valuable employee.

As a result of our experiences with Tom we have repeated and extended this program and now have two apprentices that we employed directly from University. With this second round we have made some adjustments to how we engage with them and we are looking forward to continuing to grow our own future technical and management staff. The second round of apprentices was much easier internally than the first, especially shop floor acceptance. Interestingly we had over 700 applicants for the second round at the same time another local machine shop was having no luck recruiting an apprentice.

We are very pleased with the results we have achieved and regard this initiative as how we are going to ensure that our business grows and is sustainable in the longer term.

If you would like to discuss what we are doing and how we have learned from it, please do not hesitate to drop me a line.

Richard Tovey.